Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of

Service Rules for the 698-746, 747-762 and 777-792 MHz Bands	) WT Docket No. 06-150
Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems	) CC Docket No. 94-102
Section 68.4(a) of the Commission's Rules Governing Hearing Aid-Compatible Telephones	) WT Docket No. 01-309
Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27 and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services	) WT Docket No. 03-264
Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission's Rules	) WT Docket No.06-169
Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band	) PS Docket No. 06-229
Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010	) WT Docket No. 96-86

COMMENTS OF THE NATIONAL PUBLIC SAFETY TELECOMMUNICATIONS COUNCIL

Introduction and Summary

The National Public Safety Telecommunications Council (NPSTC) submits these comments in response to the Commission's *Further Notice of Proposed Rulemaking*

(*Further Notice*) addressing the structure and rules of the commercial and public safety segments in the 700 MHz band.[1] NPSTC addresses two central elements of the *Further Notice.* The first being the Commission's intention to implement its *Ninth Notice of Proposed Rulemaking* (*Ninth NPRM)*[2] proposal to establish a national public safety licensee to manage a 700 MHz public safety broadband segment and its relationship to Frontline Wireless, LLC's (Frontline) proposal to designate a 10 megahertz "E Block" in the commercial segment.[3] Frontline proposes that the E Block licensee would construct and operate a nationwide, interoperable broadband network to be shared with the national public safety licensee. The second element encompasses the Commission's proposal to eliminate the wideband channels in the public safety segment, allowing only broadband operations while restructuring the public safety narrowband voice channels and guard band channels.

How the Commission resolves these issues will determine whether public safety agencies can gain improved communications and advanced telecommunications services. There is real opportunity to alleviate the current congested and strained environment and to make meaningful improvements to emergency response and preparedness. Yet the proposals reflected in the *Further Notice* in many respects do not recognize the realities of public safety communications. If left unchanged the proposals will result not only in

[1] The *Further Notice* addresses WT Docket No. 06-150, CC Docket No. 94-102, WT Docket No. 01-309, WT Docket No. 03-264, WT Docket 06-169, PS Docket 06-229 and WT Docket No. 96-86, FCC 07-72 (April 27, 2007).

[2] Implementing a Nationwide, Broadband Interoperable Public Safety Network in the 700 MHz band and In the Matter of the Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010, *Ninth Notice of Proposed Rulemaking*, PS Docket No. 06-229, WT Docket 96-86, FCC 06-181 (December 20, 2006).

[3] Comments of Frontline Wireless, LLC, PS Docket No. 06-229 and WT Docket No. 96-86 (filed Feb. 26, 2007), Reply Comments of Frontline Wireless, LLC, PS Docket No. 06-229 and WT Docket No. 96-86 (filed Mar. 12, 2007), Comments of Frontline Wireless, LLC, WT Docket No. 06-150 (filed Mar. 6, 2007).

no improvements but deny access to the 700 MHz band to many agencies. NPSTC's comments and recommendations are premised on ensuring that all agencies can use the 700 MHz band.

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The National Public Safety Telecommunications Council

NPSTC serves both as a resource and advocate for public safety organizations in the United States on matters relating to public safety telecommunications. NPSTC is a federation of public safety organizations dedicated to encouraging and facilitating, through its collective voice, the implementation of the Public Safety Wireless Advisory Committee (PSWAC) and the 700 MHz Public Safety National Coordination Committee (NCC) recommendations. NPSTC explores technologies and public policy involving public safety agencies, analyzes the ramifications of particular issues, and submits comments to governmental bodies with the objective of furthering public safety

communications worldwide. NPSTC serves as a standing forum for the exchange of ideas and information for effective public safety telecommunications. The following 14 organizations participate in NPSTC:

American Association of State Highway and Transportation Officials

American Radio Relay League

American Red Cross

Association of Fish and Wildlife Agencies

Association of Public-Safety Communications Officials-International

Forestry Conservation Communications Association

International Association of Chiefs of Police

International Association of Emergency Managers

International Association of Fire Chiefs

International Municipal Signal Association

National Association of State Chief Information Officers

National Association of State Emergency Medical Services Officials

National Association of State Foresters

National Association of State Telecommunications Directors

Several federal agencies are liaison members of NPSTC. These include the Department of Agriculture, Department of Homeland Security (Office of Interoperability & Compatibility SAFECOM Program and the Federal Emergency Management Agency), Department of Commerce (National Telecommunications and Information Administration), Department of the Interior, and the Department of Justice (National Institute of Justice, CommTech Program).

The National Public Safety Licensee

The *Further Notice* continues the course set by the *Ninth NPRM* where a national public safety licensee would administer the broadband segment of the 700 MHz public safety allocation to provide a nationwide public safety broadband network to improve quality and coverage and unify public safety. NPSTC stated that the Ninth NPRM proposal did not present a viable economic model.[4] NPSTC believes the proposed National Public Safety License, issued to a Public Safety Spectrum Trust Corporation (Trust), will represent the nation's public safety community and, when combined with the investment and expertise of an E-Block licensee that embraces meeting the needs of public safety, can make a difference. The Trust's relationship to the successful auction bidder of the proposed E Block, however, will be the source of its success or its doom.

The Trust must promote a) universal access by all agencies; b) an enduring modern network reflecting emergency response standards; c) local participation and d) a governing structure representing public safety. It must work effectively with the E Block licensee to ensure the commercial investment and participation that will make improvements possible. The Trust's foundation is a dedication to historic public safety requirements and standards, the success of which relies on forging a viable partnership with private interests made possible by modern technology.

[4] NPSTC Comments (February 26, 2007), Implementing a Nationwide, Broadband Interoperable Public Safety Network in the 700 MHz band and In the Matter of the Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010, *Ninth Notice of Proposed Rulemaking*, PS Docket No. 06-229, WT Docket 96-86, FCC 06-181 (December 20, 2006).

In contrast to the Cyren Call proposal where a public safety licensee manages a 30 MHz network for public safety and commercial services,[5] the Trust will encounter challenges from its reduced spectrum. While the spectrum is limited, a critical objective remains— to ensure access by all agencies to a network reflecting public safety standards. There should be clarity that the Trust and the E Block licensee will be deploying and maintaining a public safety network. The Commission must establish the parameters under which the Trust and E Block licensee will work together to bring about a broadband network consistent with public safety standards, pervasive interoperability and access by all eligible agencies. The Commission must also assure that the E-Block licensee has no future option to withdraw from its obligations to serve the public safety community. Failure to perform the obligations to public safety should result in termination of the E- Block license with no option to negotiate the public safety obligations downward.

The Trust will be a non-profit corporation and will reflect a governing body embracing public safety representation and expertise. NPSTC agrees with the Commission's direction that no commercial interest would be part of the formal governance. The Trust would be authorized to retain private or public interests to assist in performing its responsibilities. The Trust will be managed by a Board of Directors drawn from those associations representing public safety communications and reflecting extensive experience in addressing its challenges: the American Association of State Highway and Transportation Officials (AASHTO), the Association of Public-Safety

[5] Consumer & Governmental Affairs Bureau Reference Information Center, *Petition for Rulemakings Filed*, Report No. 2794, RM 11348, Part 27, Cyren Call Communications Inc., In the Matter of Communications Reallocation of 30 MHz of Corporation 700 MHz Spectrum (747-762/777-792 MHz) From Commercial Use (October 30, 2006).

Communications Officials-International (APCO), the Forestry Conservation Communications Association (FCCA), the International Association of Chiefs of Police (IACP), the International Association of Fire Chiefs (IAFC), the International Municipal Signal Association (IMSA), the National Association of State Emergency Medical Services Officials (NASEMSO), the National Sheriffs' Association (NSA) and an At Large Member to be selected by the Board. The Board would consist of representatives of those organizations. The Trust would have an initial Executive Committee, consisting of the IAFC, IACP and APCO representatives to the Board, from which the initial Chair and Vice Chair of the Trust would be chosen. The Board would adopt appropriate rules and by-laws to ensure fairness and transparency.

Additionally, the Trust and Board of Directors would be advised by a committee consisting of public safety organizations reflecting experience and expertise in government safety and emergency services such as the Fraternal Order of Police National Lodge (FOP), International Association of Fire Fighters (IAFF), National Association of Counties (NACo), National Association of Emergency Medical Technicians, Major Cities Chiefs Association (MCC), Major County Sheriffs' Association (MCSA), National Association of Emergency Medical Services Physicians, National EMS Management Association, National Emergency Number Association (NENA), American Radio Relay League, American Red Cross, the Association of Fish and Wildlife Agencies, International Association of Emergency Managers, National Association of State Chief Information Officers, National Association of State Foresters, National Association of State Telecommunications Directors, National Governors Association (NGA), National League of Cities (NLC), National Volunteer Fire

Council (NVFC), U.S. Conference of Mayors (USCOM) and the Metropolitan Fire Chiefs Association (MFCA).

The Trust would also ensure the continued role of the 700 MHz regional planning committees (RPCs). The RPCs will provide crucial guidance and advice regarding how the needs of local communities can most efficiently and effectively be met by the 700 MHz spectrum.

An important initial responsibility of the Trust will be to structure the public safety broadband network throughout the country, including preserving wideband capacity where necessary. This process commences with aligning user capacity needs, advising on application and user device standards, invoking priority access in the commercial segment, and examining commercial service secondary use and the range of matters that affect directly local public safety operations.

The Trust will face complex and varied challenges. Another initial responsibility will be to negotiate an agreement with the E Block interests, coordinate the effort throughout public safety and be accountable to the Commission. Adequate financial resources must be available to the Trust to implement these and other responsibilities capably. More broadly, the Trust must have the support of the Commission to pursue the interests of public safety; the Commission should explicitly embrace the Trust's responsibilities. Such is critical to ensure not only that the broadband network will advance public safety communications but that the competitors for the E Block licensee comprehend the challenges.

The Frontline Proposal

Frontline proposes that the upper portion of the Upper 700 MHz Commercial Services Band be restructured to designate a 10 megahertz "E Block" for a commercial licensee. This location will align with the public safety broadband segment. The licensee would construct and operate a nationwide, interoperable broadband network in the E Block and public safety broadband segment. The E-Block licensee would have secondary authority to use the public safety broadband segment.

The Frontline proposal is meritorious, but requires substantial revision. As the alternatives for use of the 700 MHz band narrow, the concept suggested by Frontline presents opportunity provided by no other rival, short of Congressional action. Yet, the path to meaningful assistance for public safety depends on the E-Block network being deployed consistent with public safety standards and on whether public safety has a partnership role in determining how the network is deployed and operated. Foremost to public safety is whether all agencies have access to the network.

NPSTC supports an E-Block and public safety network constructed and maintained consistent with public safety standards where all agencies have secure access and commercial interests are afforded a viable investment and participation opportunity. It seeks a structure that preserves public safety communication standards. Success will be defined by meeting these objectives while affording economic viability to the public private partnership. What must be avoided is an environment where cost denies agencies access or where agencies are essentially reduced to leasing commercial spectrum.

The Commission's rules should provide as much detail as possible regarding the core provisions of the "network sharing agreement" between the winner of the E Block

auction and the national public safety licensee. However, due to the limited time in this proceeding, the rules may need to be more general than we would prefer. At the same time, it is critically important that the auction participants have a strong sense, prior to the auction, of the obligations that they will be required to accept. Therefore, the national public safety licensee should prepare a document, such as a "statement of requirements" that would be available to prospective bidders. If possible there should be an opportunity for dialogue between the prospective bidders and the public safety licensee to clarify the issues.

NPSTC believes that an agreement between the winner of the E Block auction and the national public safety licensee must be negotiated and approved by the Commission prior to issuance of the E-Block license. The auction process will demonstrate only the ability to pay for the spectrum. The Commission should leave to the parties the details of the agreement and its implementation. Yet the Commission must set in its rules the parameters of the agreement, ensuring that the core requirements of a public safety broadband network are etched in the rules, beyond the reach of negotiation. These parameters will ensure that the public-private partnership has public safety interests as its foundation. The agreement and conduct of the parties should be evaluated on the basis of the standards reflected in the Communications Act of 1934, as amended, and the Commission's rules and policies and not simply a commercial agreement between two private parties.

The Commission proposes in the *Further Notice* that disputes between the E Block licensee and the national public safety licensee would be resolved through binding arbitration. NPSTC opposes the concept of binding arbitration as it would place the

future of the public safety broadband network in the hands of a third-party arbitrator. At least as to the operation of the network in public safety spectrum, the public safety licensee must have the last word.

At the outset is the challenge of how public safety will negotiate on equal footing with the prospective E Block licensee. With balanced interests, a negotiated agreement rather than a detailed mandate by the Commission will lead to more effective investment and use of the spectrum. The reality is that the public safety licensee and individual agencies have little or no leverage to use and pursue their value, particularly that of affording commercial interests secondary access to the public safety segment. Moreover, what must be recognized is that while deploying a public safety network entails costs, such costs are incremental. The E Block licensee is already committed to build a network in spectrum that has been discounted because of the obligations to public safety.

Unless some incentive is imposed on the prospective E Block licensee and the Commission establishes what parameters the agreement must address, no agreement will emerge. The ramifications of no agreement will be devastating to public safety. With no agreement, public safety will only have spectrum, there will be no build out, no access and no broadband.

NPSTC understands the Commission's concerns with the potential that no agreement may be reached between the E Block licensee and the national public safety licensee. The only appropriate solution in that case is to re-auction the spectrum, a result that neither party will want, but the only remedy that preserves public safety control over public safety spectrum. While still problematic, submitting disputes to the Commission relating to an executed agreement after the E Block license has been issued may be a

viable option insofar as the Commission's decisions would be driven by the Communications Act and its obligation to promote safety of life and property. Thus, in either case, it is imperative that the Commission assume an active role in dispute resolution to prevent the possibility that public safety finds itself in a permanent relationship with an unacceptable commercial partner under unacceptable terms.

The Commission should explicitly establish the premise that the E Block network is a public safety network constructed and maintained by a private party. Beyond all parties adhering to good faith standards, the Commission should also require that the agreement reflect public safety's meaningful participation in the technology, deployment, rollout, administrative and logistic decisions associated with the network. The network's infrastructure and operations, and its quality of service, must reflect public safety's long identified standards of coverage, priority access and system restoration, reliability and security.[6]

Reliable system access and coverage are two of the critical concerns for any public safety network. The proposed nationwide broadband network is no exception. We have considered several build out coverage scenarios. Public safety needs a reliable system that has the best possible coverage. It is not enough to have coverage that merely mirrors traditional cellular coverage. We strongly encourage the Commission to mandate minimum coverage requirements of 99.3% of the population at year 10. This equals 63.5% of the US (including Alaska, Hawaii and Puerto Rico) and 75% of the contiguous 48 states. Effectively this is coverage to every county with a population density of five or more persons per square mile. We think it is also important that the Commission impose

[6] *Final Report* of the Public Safety Wireless Advisory Committee (PSWAC), page 4 (September 11, 1996).

interim coverage benchmarks, such as 25% of population within 4 years and 95% of population within 7 years.

Capacity is also a key consideration. In fact, any discussion of coverage without including capacity is moot. The Commission should require a detailed capacity plan as one of the central elements in the negotiated agreement between the E Block bidder and the national public safety licensee.

The imbalance in negotiations is also seen in the extreme disadvantage individual agencies will have in negotiating with the E Block licensee for access. The Commission should ensure that the negotiation process between public safety and E Block licensee properly reflects public safety's contribution of its spectrum to this single, shared network in a form that is meaningful to public safety network users. The Commission should establish a parameter that affords reasonable access yet imposes a discipline. Complex formulas and commercial rates should be avoided.

NPSTC anticipates the relationship between the national public safety licensee and the E block licensee to be conducted in the spirit of a partnership. In business, partnerships identify the rights of the various partners. As a core requirement in the rules, NPSTC recommends that the nationwide public safety licensee be provided the authority to veto any subsequent proposed license transfer or disaggregation/partitioning of the E block license that it believes would be detrimental to the deployment or continued operation of nationwide broadband system.

Commercial access to the public safety spectrum must be subject to unconditional pre-emption by public safety, as specified in the *Ninth NPRM*. How public safety operations will be protected requires technical analysis from which protocols and

monitoring standards can emerge. It should be clear that there can be no broadband access, secondary or otherwise, to public safety's narrowband voice channels.

The Frontline proposal offers public safety access to its commercial network in an emergency. The agreement must resolve the details within Commission set parameters. NPSTC believes that the provision is of little or no value if limited to large incidents; virtually every public safety response is an emergency to someone and the need for access should not be confined by the character of the incident but the need to assist the citizen. Systems used in major incidents must also be used on a daily basis or lack of familiarity with them on the part of providers will cause them to fail when they are most needed. There should also be no hierarchy of approvals to invoke access; experience has shown that by the time the process is exhausted, the need has passed. Any system should automatically allocate spectrum to public safety users, even to the extent of totally blocking commercial traffic. Public safety users should never receive an "all circuits busy" unless all circuits are busy because of only public safety traffic.

The national public safety licensee will coordinate with the activities of the RPCs and government and industry experts in implementing a nationwide public safety broadband network. The Commission should require the agreement to address how this detail-driven process will proceed, the accommodations that will need to be formed to ensure access to the 700 MHz in all environments and the alignment with the infrastructure investment.

The Commission must also address circumstances where the E Block licensee encounters financial challenges that threaten the public safety network. These include the filing of any bankruptcy petition, voluntary or involuntary, the appointment of a receiver

or a default on any security obligation. To safeguard public safety operations, the Commission should require the posting of a letter of credit or similar instrument that will be engaged by any of these actions and will fund the continued investment and maintenance of the network. The letter of credit must be insulated from any other claims and devoted solely to the public safety network. A default circumstance should entitle the Commission to examine the capability of the E Block licensee to continue holding its license as maintaining the public safety segment should be viewed as a critical obligation. In any transfer of control application, the Commission should likewise examine the applicant's capability to meet these responsibilities. The Commission should also adopt a provision similar to Section 214 of the Communications Act which requires Commission consent before a critical network is turned off.

NPSTC expresses concern regarding Frontline's proposal that the E Block requires an open access regime. The issues of open access, and indeed its very definition and scope, is subject to debate, including a recently commenced Commission proceeding. NPSTC endorses an open architecture model that promotes innovation in equipment, devices and applications that rely on an underlying platform. Yet the ability of all devices and equipment to gain access and reciprocity from the network presents questions, particularly to security and encryption, none of which are fully understood technically or as a policy matter. There is also the question of whether network providers and infrastructure and equipment manufacturers would be deterred from competing in such a regime.

The Commission should also clarify the legal underpinnings of its proposal allowing commercial access to the public safety segment, particularly in

view of its position that it cannot allocate additional spectrum to public safety in the 700 MHz band because of the Congress' decision allocating the band between public and private use.

NPSTC believes it is critical the Commission establish these parameters in its rules: that all agencies have access to the network, that the network meet public safety standards and that it continually be refreshed to provide advanced services. Once a viable network emerges, the E Block licensee and the Trust will have a long relationship that will quickly move from such fundamentals. The clarity of these parameters will enable commercial investors to properly structure their plans prior to the auction process. Without such parameters, the imbalance and uncertainty will keep the opportunities of the 700 MHz band distant from public safety.

An All Broadband Public Safety Segment Requires a Reasoned Migration

In the *Further Notice*, the Commission tentatively concludes to redesignate the current public safety wideband channels to broadband use, impose a nationwide interoperability standard and prohibit wideband operations on a going forward basis. It will relocate the 700 MHz public safety spectrum, with the narrowband spectrum being consolidated to the top of the public safety allocation and a broadband segment located at the bottom of the public safety allocation. These concepts shape the proposal in the *Ninth NPRM* to establish a national public safety licensee. Any move to broadband requires a reasoned migration.

The Commission's recognition of the need for an all broadband interoperable network is well founded. The citation of public safety agencies and their affiliated

organizations, including NPSTC, embracing the need for advanced services for a range of agencies, is correct with a crucial caveat. All agencies must have affordable access to the 700 MHz band and the range of environments public safety must operate in must be accommodated. NPSTC comprehends that a nationwide network must encompass consistent parameters, avoid balkanization and provide various applications and services. Yet the Commission's decisions must drive toward all public safety agencies having affordable access to a broadband network. Only then can meaningful improvements be made to emergency response, preparedness, detection and investigations.

The reality is that if the proposal to form a public-private partnership is adopted by the Commission and moves forward to develop a nationwide public safety broadband network, it will take time to implement. And if such a proposal fails, then local agencies will continue to be responsible for building their own wireless data networks. We believe that in many cases local agencies will not be able to afford implementing broadband systems where they would require many more cell sites than wideband systems. The weakness of the *Further Notice* is that in many respects it does not confront, much less resolve these challenges. It does not recognize the need for a transition. NPSTC does not support any proposal that fails to do so.

Wideband operations are considerably more affordable than broadband, a circumstance that will not change dramatically soon. One key factor relates to the costs associated with public safety coverage demands. Deployment is not based on population but on the need to communicate in an emergency. Broadband systems in general require more transmitter sites than wideband operations; in contrast to wideband, broadband

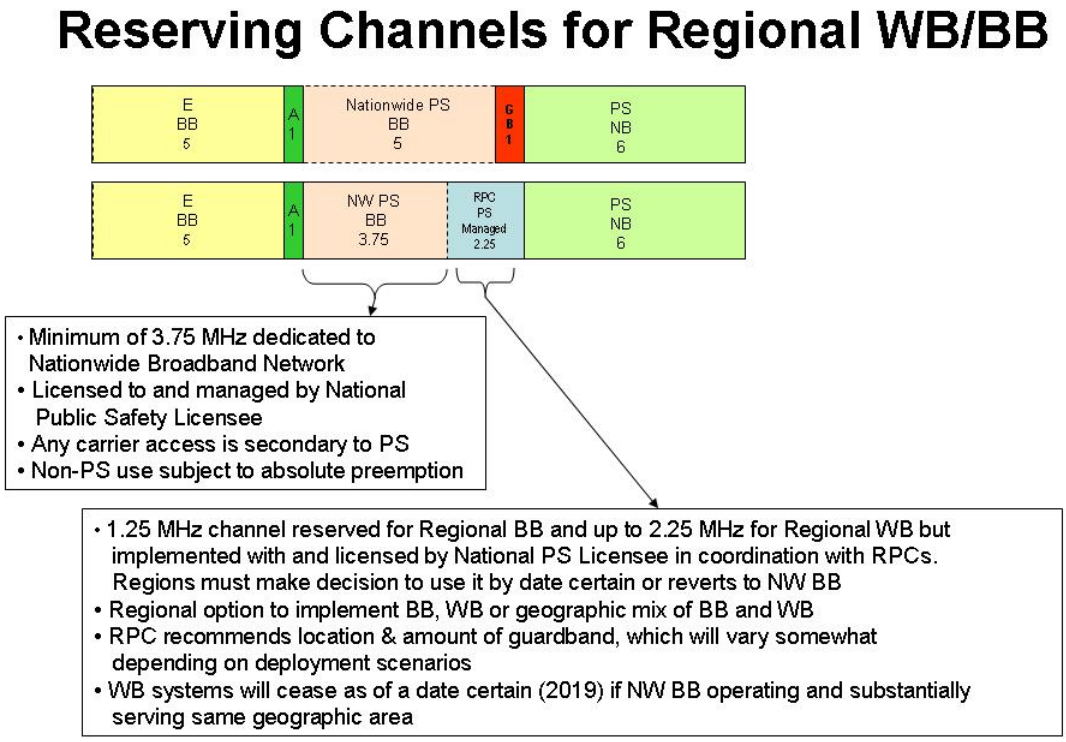
offers little flexibility to allow reuse of narrowband voice sites. The addition of even one tower may place an entire system beyond the financial resources of an agency.

This significant cost differential between wideband and broadband, and terrain and other geographic factors combined with agency service requirements that need only data services will otherwise lead many agencies to deploy wideband. The *Further Notice's* elimination of wideband and the *Ninth NPRM's* failure to present a viable economic model will move all costs to state and local government. The result will deny access to the 700 MHz band by agencies unable to pay.

The *Further Notice* does not address the issue of regional and local involvement in the deployment of a nationwide network and, thereby, does not capture the necessary collaboration between national and local public safety interests. Agency requirements, geographic conditions and financial resources are the factors the regional planning committees (RPCs) use to determine 700 MHz band use. The RPCs enable those responsible for public safety to structure how communications resources can best support operations. The *Further Notice*, in embracing universal broadband, ignores the value of local participation. No matter what the network or technology, local agency opportunity to participate meaningfully is vital.

The Commission should recognize the benefits of wideband for the near future, the importance of local participation and that a broadband network will not be constructed and deployed nationwide immediately subsequent to the broadcast transition in 2009. NPSTC's position seeks to balance the legitimate need to allow access to spectrum resources to respond to local needs until a broadband network is deployed with the efficiencies that will flow from a nationwide network. NPSTC recommends that

wideband capability be preserved for a period of time. The following discusses this precept in detail. It assumes a consolidation of public safety narrowband channels as discussed further below:



The national public safety licensee should have the authority to exclude certain frequencies from the national sharing agreement in certain geographic areas. This would accommodate state or local governments that have the need, plans and funding to construct and operate their own data networks, apart from the national network. It would also allow for data networks (either wideband or broadband) to be deployed in sparsely populated areas well ahead of the national network deployment in those areas. We contemplate two methods by which such alternative networks would be authorized. In both cases, the alternative networks would be limited to no more than 2.25 MHz, and

would be the spectrum closest to the new public safety narrowband allotment. Appropriate guard bands for protection between broadband channels and narrowband channels and between broadband channels and wideband channels would be required within this allocation.

First, the national public safety licensee would survey all 55 700 MHz Regional Planning Committees and solicit information from state and local agencies to determine if there is a consensus within a region as to whether the 2.25 MHz block should be made available for systems apart from (but interoperable with) the national broadband network. If a regional planning committee does not pursue such opportunity and there is no substantial state/local government interest in a separate network in that region within a specified time period to respond, the 1.25 MHz channel and 1 MHz guard band between public safety broadband and narrowband would be included in the national network in that region. If the region does pursue using the channels, the national public safety licensee would authorize state or local systems in the region to use the 2.25 MHz of spectrum, so long as those systems are deployed within a specified time frame (e.g., 5 years), are interoperable with the national network and are coordinated to avoid interference. Such use would have primary status until February 2019, i.e., 10 years after full TV clearing. Thereafter, the spectrum would revert to the national licensee for inclusion in the national broadband network. However, if the national broadband network is not operating in a region and substantially serving the same area, local/regional wideband or broadband systems could continue operating with primary status beyond February 2019 until the nationwide broadband network is available in that area.

Second, even if a region does not engage the opportunity by the specified timeframe to respond, any public safety agency would be able to construct and deploy its own *wideband or broadband* system at any time in the 2.25 MHz spectrum block, *but it would be secondary to the national broadband network.* Such secondary networks would still require authorization from the national public safety licensee and frequency coordination. Secondary systems would be built with an understanding that the spectrum would be relinquished once the national network is built out in the relevant area.[7] This secondary approach would allow for data systems to be deployed in areas unlikely to be reached by the national broadband network for many years, but where funds are available to deploy a local data network.

If the "secondary" local deployment under the second scenario is broadband, it would need to be compatible with the national network. To the extent wideband systems are built in this scenario, there would be no direct interoperability at first, but again these are in areas where there is *no* broadband deployment yet, so *some* public safety wideband data (wideband) is certainly better than waiting for any long period for broadband. Once the broadband network expands to the relevant area, the spectrum would be relinquished or perhaps network-level interoperability would be established for an interim period. Some possible scenarios could be:

1. A region can choose to build a regional/local broadband system(s) in a 1.25 channel without changing the GB that would be between BB and NB.

2. A region can choose to build a wideband system(s), shifting the 1 MHz guard band so it is between BB and WB. It may also be possible for a wideband network to use a small portion of the guardband if additional channels are needed, depending on the geographic spacing between wideband and broadband cells. This would be

[7] The local agency that built the secondary network may be in a position to enter into an agreement to provide its infrastructure for the national network when it relinquishes use of the spectrum.

determined and managed by the national public safety licensee and the relevant regional planning committee(s).

The *Further Notice* speaks of the benefits broadband will bring to public safety but only in a context of what might be if adequate resources are available. It does not address the historic under-funding of government communications systems. Ignoring it will mean that nothing will change. NPSTC's recommendation that wideband channels be maintained for a period of time relies on a model emerging that assures public safety access by all agencies. The resolution of this challenge will determine whether public safety communications can improve meaningfully. As discussed above, unless the *Further Notice* addresses these realities, access to the public safety 700 MHz broadband portion will be unreachable by many agencies.

Relocating the Narrowband Public Safety Channels and Eliminating the Guard Band B Block

The *Further Notice*, to provide all broadband data spectrum to public safety and promote efficiencies in the commercial segment, would restructure the current public safety and guard band channels. This restructuring presents several costs that will have to be borne by individual agencies and a significant operational challenge.

The most vexing challenges facing the public safety community when considering the possibility of consolidating its narrowband voice allocation involve the agreement between the United States and Canada and addressing how the 700 MHz band would be utilized and shared in the border areas.[8] Canada will move broadcast operations from

[8] Sharing Arrangement Between the Department of Industry of Canada and the Federal Communications Commission of the United States of America Concerning the Use of the Frequency Bands 764 to 776 and 794 to 806 MHz by the Land Mobile Service Along the Canada-United States Border, Arrangement G Land Mobile (Public Safety Services (June 20, 2005) at http://www.fcc.gov/ib/sand/agree/can_nonbroad_agree.html,

channels 64 (770 MHz-776 MHz) and 69 (800 MHz-806 MHz) on August 29, 2011.[9] Until this time, agencies along the border will not have access to a number of the relocated narrowband voice channels. Similarly, there is also the need to preserve narrowband interoperability relationships with Canadian agencies.

Under Proposals 1 and 2, the *Further Notice* proposes to create a temporary easement of 1 MHz for public safety broadband use in the adjacent commercial block.[10] The easement is designed to enable border agencies to conduct narrowband communications in TV channels 63 and 68 until Canadian broadcast operations transition from channels 64 and 69. Unfortunately, the easement approach has several deficiencies and ultimately fails to solve public safety's interoperability needs in border areas. First, the *Further Notice* does not recognize that public safety systems would have to transition to new narrowband channels at costs to be absorbed by the agency. Moreover, agencies in the border regions would face two transitions; first to transition to the "temporary" narrowband channels and second to transition to the "permanent" ones following the completion of the Canadian TV re-location. When the second transition will occur and how much it will cost is unknowable. More significantly, the easement defeats the objective that the 700 MHz band provide regional, statewide and national interoperability. With the border area narrowband communications located in TV channels 63 and 68 and the rest of the state, region and country located in the narrowband channels enumerated by the *Further Notice* (i.e., in TV channels 64 and 69), there will be

[9] Broadcasting Public Notice, Canadian Radio-television and Telecommunications Commission CRTC 2005-53, "Determinations Regarding Certain Aspects of the Regulatory Framework for Over-the-Air Television," at ¶ 61 (rel. May 17, 2007), available at http://www.crtc.gc.ca/archive/ENG/Notices/2007/pb2007-53.htm.

[10] *Further Notice* at 189.

no interoperability. The purpose-of using radios that include standardized interoperability is to avoid the current reprogramming or capacity challenges when out of region agencies are dispatched to an incident. Under the easement proposal, this critical capability will be lost. Simply put, unless there are permanent narrowband interoperability channels uniformly distributed across states, regions and the country in *all* of TV channels 63, 64, 68 and 69, there will be no interoperability for agencies in the 18 border states. This presents an unacceptable risk to the safety of members of the public safety community and the citizens in these border areas.

The easement proposal arises in two proposals designed to add spectrum to the 700 MHz commercial segment. This additional commercial broadband spectrum is only made possible by the consolidation of public safety's narrowband allocation.[11] The *Further Notice* presents five proposals. Proposals 1 and 2 reconfigure the band to advantage the commercial allocation while creating significant problems for public safety. By contrast, the *Further Notice* also contemplates, in proposals 3, 4 and 5, a recommendation and variations submitted by Access Spectrum and Pegasus, the guard band licensees. Access Spectrum and Pegasus propose that the public safety allocation would be shifted down by 1 megahertz, resulting in the overlap of public safety narrowband spectrum onto TV channels 63 and 68 to solve public safety's need for narrowband interoperability. This is made possible by the cooperation of the guard band licensees who must vacate their spectrum to allow public safety's allocation to move onto 1 megahertz of each pair of the current B Block licenses. These latter three proposals result in varied configurations designed to enhance the efficacy of commercial services in

[11] This fact underlines what a tragedy it would be for the FCC to adopt Proposals 1 or 2. These proposals are only made possible by public safety's cooperation yet the effect would be devastating to the public safety community.

the band, including the ability for the FCC to auction 32 MHz of commercial broadband spectrum in a uniform manner, nationwide.

Proposals 1 and 2, which embrace the easement approach, provide no benefit to public safety and will do serious harm to public safety communications in the border regions as they fail to resolve Canadian broadcast interference. These proposals should be rejected. The wisdom of the Commission decision to reject Proposals 1 and 2 is made clearer by the presence of Proposals 3, 4 and 5 which address the border circumstances resulting from relocating the narrowband voice channels.[12] Accordingly, NPSTC urges the adoption of one of these proposals.

The five proposals to allocate guard band channels to commercial services are driven by the Commission's determination that it cannot, at least until the completion of the broadcast transition in 2009, provide additional channels to public safety in the 700 MHz band. Additional spectrum for public safety was the center of the original proposal by guard band licensees Access Spectrum and Pegasus, in what is referred to as the Broadband Optimization Plan (BOP). The BOP provides guard band licensee's greater compatibility to the rest of the commercial segment. It would also provide additional channels for public safety, a motivating factor in NPSTC's extensive analysis that overcame the concern regarding the financial and logistical challenges associated with relocating the narrowband voice channels. Instead, under the *Further Notice*, public safety faces relocation but no additional channels.[13]

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[12] Access Spectrum and Pegasus have placed into the record a complete analysis of the flaws in the "temporary easement" plan under Proposals 1 & 2 and the virtues of the "permanent shift" plan under Proposals 3, 4 and 5. Public safety has reviewed that analysis and affirms its accuracy and merit.

[13] In referencing Verizon's objection to the BOP, the Commission inquires of its technical sufficiency to protect both commercial and public safety operations. At the forefront of NPSTC analysis of the technical information placed in the record was whether the spectrum could be used effectively, that it create no

Beyond the operational challenge in the border areas, the restructuring presents public safety with significant costs and additional effort, with potentially no outside financial resources to accommodate them. These relate to the assignment of channels and planning by the regional committees that will have to start anew, the revision of the 700 MHz Computer Assisted Pre-coordination and Resource Database System (CAPRAD) database and the adjustments to equipment and infrastructure by agencies that have already commenced operations in the 700 MHz band under the current rules. The *Further Notice* suggests that public safety agencies fund their own relocation on the rationale that the restructuring provides an overall benefit.[14] It then suggests that the relocations be funded through Congressional interoperability grant programs tied to the sale of 700 MHz spectrum. The *Further Notice* also suggests the possibility that 700 MHz commercial licensees pay for the equipment adjustment costs. None of these ideas should be considered. Instead, under Proposals 3, 4 and 5, Access Spectrum and Pegasus have agreed to fund the relocation of the public safety narrowband systems and pay to re-program the CAPRAD database subject to certain conditions (e.g., the harmonization of the A Block's technical rules to that of the C & D blocks and the fair compensation for licenses they are giving up to accommodate public safety's need to shift its allocation to enable narrowband interoperability in the border regions). We believe the Commission should accept their proposal. It is also worth noting that the C Block licensees greatly benefit from the consolidation of public safety's narrowband allocation in that the C Block increases either

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interference for either public safety or commercial operations. The detailed analysis of the proposal that emerged indicated how public safety and commercial services can coexist. Verizon's analysis failed to address the details, including the premise that the guard band need would be moved to a public safety responsibility. NPSTC *Ex Parte* letter addressing Verizon's objection to the BOP, in WT Docket No. 06-169, WT Docket No. 96-86, WT Docket 06-150, PS Docket 06-229 (February 23, 2007).

[14] *Further Notice* at paragraph 264.

from 10 MHz to 11 MHz or 5 MHz to 5.5 MHz. Therefore, in the alternative, the C Block licensee should be required to pay to enable public safety's consolidation.

Any imposition of these costs on the individual public safety agency is unfair. All the resources expended, whether for equipment, or for planning, designing and maintaining a database, relied on the Commission's rules. Commercial interests will benefit significantly from the relocation. Any suggestion that Congress realign the interoperability grant program to absorb these costs is premised on hope, upon which a reasoned regulatory process should avoid basing its decisions. The Commission, in the context of establishing auction and service rules that will generate billions of dollars in revenues, must resolve these challenges within the context of the pending 700 MHz proceedings and ensure that individual agencies are made whole.

Conclusion

NPSTC urges the adoption of a National Public Safety License and an E Block. Yet, these proposals that would deploy and maintain a public private network will only be viable if all agencies have access and the network represents public safety standards. NPSTC urges the Commission to make emphatic in its rules these precepts prior to any auction of the 700 MHz band.

Respectfully submitted,

Vincent R. Stile

Vincent R. Stile, Chair
NATIONAL PUBLIC SAFETY TELECOMMUNICATIONS COUNCIL
8191 Southpark Lane, Unit 205
Littleton, Colorado 80120-4641
866-807-4755